DOCUMENT RESUME

ED 326 000 EC 232 603

AUTHOR Price, Lynda
TITLE Self-Esteem Levels of Learning Disabled Adolescents and Adults.
PUB DATE 89
NOTE 15p.
PUB TYPE Reports - Research/Technical (143)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Education Work Relationship; High Schools; Intervention; *Learning Disabilities; Postsecondary Education; *Self Concept; *Self Esteem; Self Evaluation (Individuals); Student Characteristics; Test Validity; Transitional Programs
IDENTIFIERS *Janis Field Feelings of Inadequacy Scale; LD Transition Project

ABSTRACT

The paper reports on a study of the self-concepts of 56 high school juniors and seniors with learning disabilities by means of analysis of empirical data and staff observations. Subjects were participants in the Learning Disability (LD) Transition Project (Minneapolis, Minnesota). Project goals included improving self-concept scores of students with low scores, exposing students with unrealistically high views of their abilities to others with a broader range of skills and abilities, and evaluating these interventions. Subjects were given the Janis-Field Feelings of Inadequacy Scale and the Rosenberg Scale. Pre-scores indicated that although a few students had very low or very high mean scores, the majority of participants scored in the average range of self-esteem. Intermediate and post-participation scores found little effect of either the intervention or of transition into postsecondary settings, employment, or the military. Subjects appeared to have similar levels of self-esteem than non-learning disabled students. An additional finding was that the Janis-Field scale appears valid when correlated with the Rosenberg measure. Limitations of the study such as teacher selection for the project of their "best" LD students are noted. Thirty-one references are listed. (DB)

**********
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
**********

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☑ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

ED326000

# Self-Esteem Levels of Learning Disabled Adolescents and Adults

Lynda Price

PLEASE NOTE: This is a working manuscript of Project Extra. Questions, comments, or feedback about material contained in this manuscript should be directed to the author at the University of Minnesota (240 Appleby Hall, 128 Pleasant St. S. E., Minneapolis, MN., 55455). Thank you!

EC 232603

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Lynda Price
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

*Introduction*

Many professionals, drawing on their own experiences, have observed that learning disabilities have a long-term psychosocial impact on adolescents and adults. They now believe that LD children do not "grow out" of their disability as they mature towards adulthood. (Alley, G., Deshler, D., Clark, F., Schumaker, J., & Warner, M., 1983; Buchanan & Wolf, 1986; Kroll, 1984; Morse, 1977; Rosenthal, 1986). Instead, numerous authors contend that the socio-emotional characteristics seen in LD children often remain and may become more entrenched in adulthood (Huestis & Ryland, 1986; Kuncaitis, 1986; National Joint Committee on Learning Disabilities, 1987; Smith, 1986). For example, Cohen (1985) states that "although there are many children with learning problems who are not learning disabled, there are virtually no learning disabled....adolescents who do not evidence significant psychological conflicts and concerns."

These psychosocial ramifications can be positive or negative and will vary in unique configurations among LD individuals. For instance, individual characteristics which have been readily observed in LD students include: depression, feelings of incompetence and inadequacy, frustration, anger, excessive dependency, shyness, impusivity, and lack of motivation. (Brown, 1982; Cohen, 1985; Geist & McGrath, 1983; Hogenson, 1985; Hoffman et al, 1987 and Lutwak & Fine, 1983). Individuals who are learning disabled often exhibit many positive psycho-social traits as well, such as: warmth, boldness, creativity, and persistance (Hogenson, 1985).

One of the most commonly cited psychosocial characteristics observed in LD individuals is a pervading sense of low self-esteem or a poor self-concept (Beare, 1975; Cohen, 1984; Cohen,1985; Geist & McGrath, 1983; Morse, 1977; Rosenthal,1973; Smith, 1986). It should be noted that these terms are used interchangably in the current literature. A low self-concept has been described by various LD service providers in many ways, but one common theme emerges. Learning disabled individuals from many different settings, ages, and educational backgrounds all express feelings of inadequacy, failure and shame.

For instance, Morse (1977, pg. 9) says, "I have observed that [LD] youngsters themselves describe their feelings of inadequacy and ineptness and feeling different, disliked, and stupid....After experiencing years of frustration, disappointment, and failure, learning disabled students often conclude that they are worthless and unimportant. They may conclude that nothing they do will make any difference [in their lives] and thus stop trying. This attitude further reinforces feelings of failure and sets up a vicious cycle."

Cohen supports these views in two studies. He found in his 1985 study that "a learning disabled adolescent's conscious experience of self was commonly and consistently marked by feelings of incompetence, inadequacy, and anxious anticipation of failure" (pg. 182). He noted in a second study (1984) that negative, internal self- representations were crystallized in his subjects by the mid-juvenile years (i.e. ages seven to eight).

Low self-esteem can be directly related to other negative, behavioral manifestations (e.g. mental health problems, difficulities communicating with others, excessive amounts of stress and anxiety, and dysfunctional interactions with spouses or children). For instance, Brumback and Stanton (1983) have stated that current research may show a connection between learning disabilities and biologically based

depressive illnesses. Inappropriate or inadequate social skills can go hand-in-hand with a low self-concept (Alley, Deshler, Schumaker, & Warner, 1983; Bergman, 1986; Brown, 1982, Neault, 1986; Okolo & Sitlington, 1986; and Smith, 1986). Low self-concept and the resulting inadequate social skills can, in turn, strongly influence other facets of the lives of learning disabled adolescents and adults. One critical area is the world of work, where vocational success is especially at risk (Brill & Brown, 1986; Brown, 1982; Geist & McGrath, 1983; Okolo & Sitlington,1986 ).

As a result, this paper may be of interest to professionals because it provides a different view of the self-esteem of LD individuals than has been described previously in the literature. It also reports on preliminary efforts to gather empirical data about this critical subject based on the research of the LD Transition Project.

*Subjects*

The LD Transition Project was a three year federally funded research/ demonstration project located at the General College-University of Minnesota. It was originally developed to look at the transition process of learning disabled individuals as they moved from secondary to post- secondary and/or vocational settings. Approximately 150 learning disabled high school juniors and seniors were initially referred to the LD Transition Project by teachers and counselors from the seven public high schools in Minneapolis, Minnesota.

Four entrance criteria were used to determine if the LD students were eligible for project participation. (The four criteria were: a documented LD diagnosis; a current IEP on file; average or above average intelligence as shown by scores less than three years old from a standardized intelligence test; and demonstrated academic achievement commensurate with peers in at least one academic area. Commensurate areas were carefully documented by at least two different measures.) If a student had successfully met all four of the entrance criteria, s/he was then invited to participate in the Transition Project. Approximately 56 juniors and seniors with learning disabilities from the referral pool met these initial criteria and participated in the Project from 1986-1989. (For further information see: Aase & Price,1987; Johnson, 1989; Ness, 1989; Price & Aune,1988).

*Goals of the Study and Project Intervention*

The staff of the LD Transition Project theorized that one's self-esteem could be a critical component in the successful transition process for an individual with learning disabilities, as s/he moved from a secondary to a postsecondary setting. Therefore, one goal was to gather both empirical data and related staff observations (in the form of casenotes) about the level of each LD students' self-esteem during his/her participation in the Transition Project from 1986-1989. Standardized instruments (see methods section below) were also used to gather information on individual levels of self-esteem.

If the scores were on the extreme ends of the continum, Project transition counselors saw these as indicators for further services. Consequently, a second goal of the project was to improve the self-concept of students with lower scores, by

increasing the student's understanding of her/his learning disability as a processing and communication disorder rather than a statement of intelligence or ability. These students were also encouraged to recognize and emphasize their individuals strengths rather than their weaknesses.

A third goal of the project addressed project participants with unrealistically high views of their abilities. They were provided with opportunities to try out their skills in mainstreamed settings. For example, the Project assisted these students to take community college or university coursework through the Minnesota Postsecondary Options Program, where they would be exposed to a broader range of abilities and skills than in the secondary environment.

The fourth Project goal explored the results of these interventions, as they applied to self esteem. After the Project activities were completed, satisfaction and outcome data was collected from the Project participants. The LD students reported that they generally developed a more positive self-concept and had improved their understanding of their learning disabilities by participation in Project activities.

## *Methods, Analysis and Results*

After participant selection, the project staff began collecting data concerning the levels of self-esteem of the Project participants. Self- esteem data was gathered about all project participants periodically during the three years of the project, using two instruments: the Janis-Field Feelings of Inadequacy Scale (Robinson & Shaver, 1973) and the Rosenberg Scale (Robinson & Shaver, 1973). The Janis-Field is a 20-item self-report instrument which rates levels of self-esteem according to individual classifications (e.g. low, low-average, average, high-average, high) . Each question is in the form of a Likert item, with a response scale from one to five (one being the lowest response and five being the highest response). The Rosenberg is a similar instrument in many ways to the Janis-Field. It is a 10 item self-report instrument which also rates levels of self-esteem using a Likert-type scale. (However, the responses ranged from one as the lowest response to four as the highest response.)

Additional information to supplement the standardized instruments were obtained both from staff observations and extensive, detailed casenotes about interactions with each LD student, his/her family and the various professionals who worked with the students during Project participation.

Based on the current literature, higher functioning learning disabled students were thought to have a low self-esteem levels. Because of this assumption, it was theorized that various Project components (e.g. the personal attention of the transition counselors, the increased knowledge of personal strengths and weaknesses, and instruction and assistance to obtain the accommodations) would enable each LD student to successfully attempt and/or complete the transition from secondary to postsecondary school. This success, in turn, would positively influence each LD student's self-concept. The feasibility and validity of these assumptions were tested by the subsequent data collection and analysis. As seen in the following items from the database, a number of interesting trends emerged:

1. Pre-scores on the Janis-Field: The Janis-Field was given to all LD individuals when they entered the Project. The self-esteem scores on this instrument ranged from 3.5 to 3.7, with the mean score for all LD students at entry being 3.53 (S.D. .54). Approximately 2/3 of the project participants scored in the "average" (between 3.0 and 4.0) range of self-esteem on this instrument when they started in the Project.

A mean Janis-Field score of 3.53 clearly shows for this population that the mean entry self-esteem score was "average", and not "below-average" as the literature would suggest. It should also be noted that a few of the LD students had very low mean scores (1.0-2.0) and others scored very high (4.0-5.0). As illustrated by these scores, some of the LD students appeared to have unrealistically high or unusually low self-concepts. (However, the majority of all Project participants scored in the average range of self-esteem.) See figure 1.

2. Intermediate- and Post- Participation Scores on the Janis-Field: The Janis-Field was re-administered to the same group during their second and third years of Project participation. These re-tests resulted in similar mean scores for both years (Year 2 Mean = 3.5, Year 3 Mean = 3.60, SD = .65). See figure 2.

The staff was curious to see if participation in Project activities would result in a change among the pre-, intermediate, and post-participation mean scores of the LD students. But, individual differences among these means were found to be insignificant, when looking at change scores of individual Project participants over the three years of the Project. For example, the fluctuation, or slight increase of some scores and the slight decrease of other scores, resulted in Pearson Correlation Coefficient of .37 between the Janis-Field during the first, second and third years of the Project.

The post-intervention scores were also be analyzed in another way. An attempt was made to give the Janis-Field and the Rosenberg to all students by mail after they completed their participation in the project. Follow-up scores obtained for 25 former participants showed a Mean score of 3.58 with a SD of .65. A similar mean score was found on the Rosenberg, which was taken at the same time. Consequently, there was no change in self-esteem mean scores of this sample after they completed Project participation, when measured by both instruments. There was also no clear pattern which showed an increase or decrease in self-esteem. Individual scores did go up or down, but it unclear whether this is due to chance, maturation, or to the Project intervention.

The post-intervention data was also analyzed by comparing the mean scores of the participants who had completed Project activities with those participants who were still in high school when federal funding ended in August,1989. Interestingly enough, the results were similar for both groups. The Janis-Field and the Rosenberg were given to the LD high school seniors at the same time as the instruments were mailed to the post-intervention group. The high school seniors had a mean Janis- Field score of 3.04. The post-intervention group had a mean score of 3.58 with a SD of .65. When these scores are compared (e.g. 3.58 and 3.04 ), there is a correlation of .87. Hence, there appears to be no significant differences in self-esteem levels between those LD participants who are still in high school and those participants who have made the transition to postsecondary settings, employment or the military.

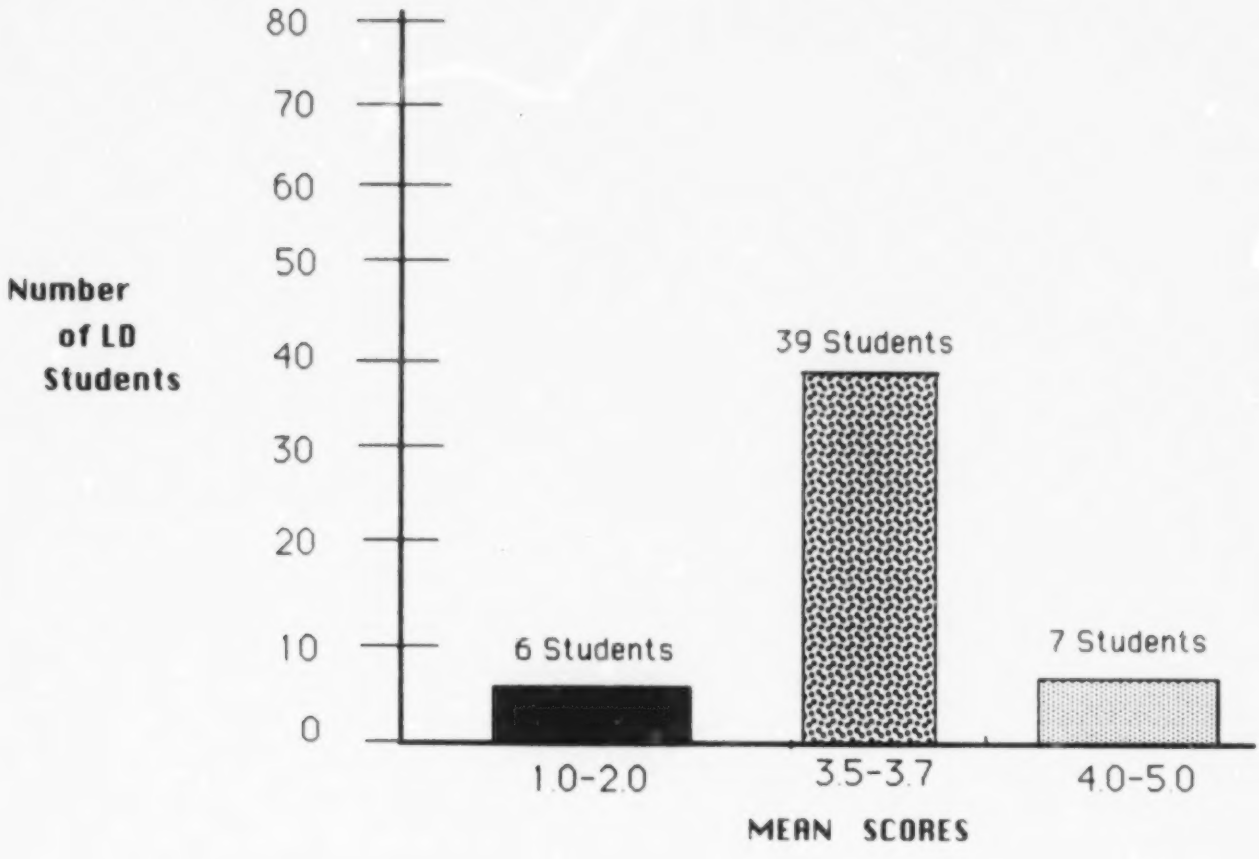
80
70
60
50
40
30
20
10
0
Number of LD Students
6 Students
39 Students
7 Students
1.0-2.0
3.5-3.7
4.0-5.0
MEAN SCORES

Figure 1

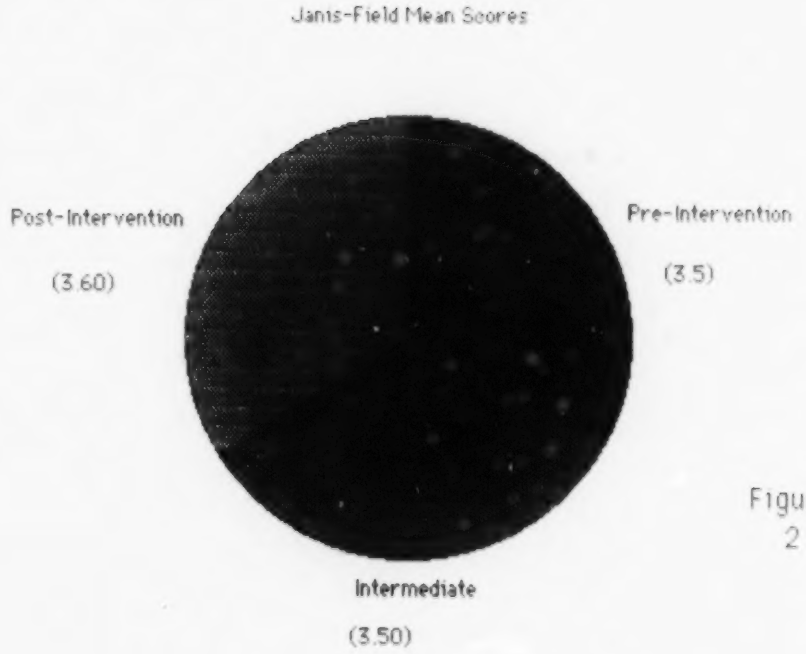
Janis-Field Mean Scores
Post-Intervention
(3.60)
Pre-Intervention
(3.5)
Intermediate
(3.50)

Figure 2

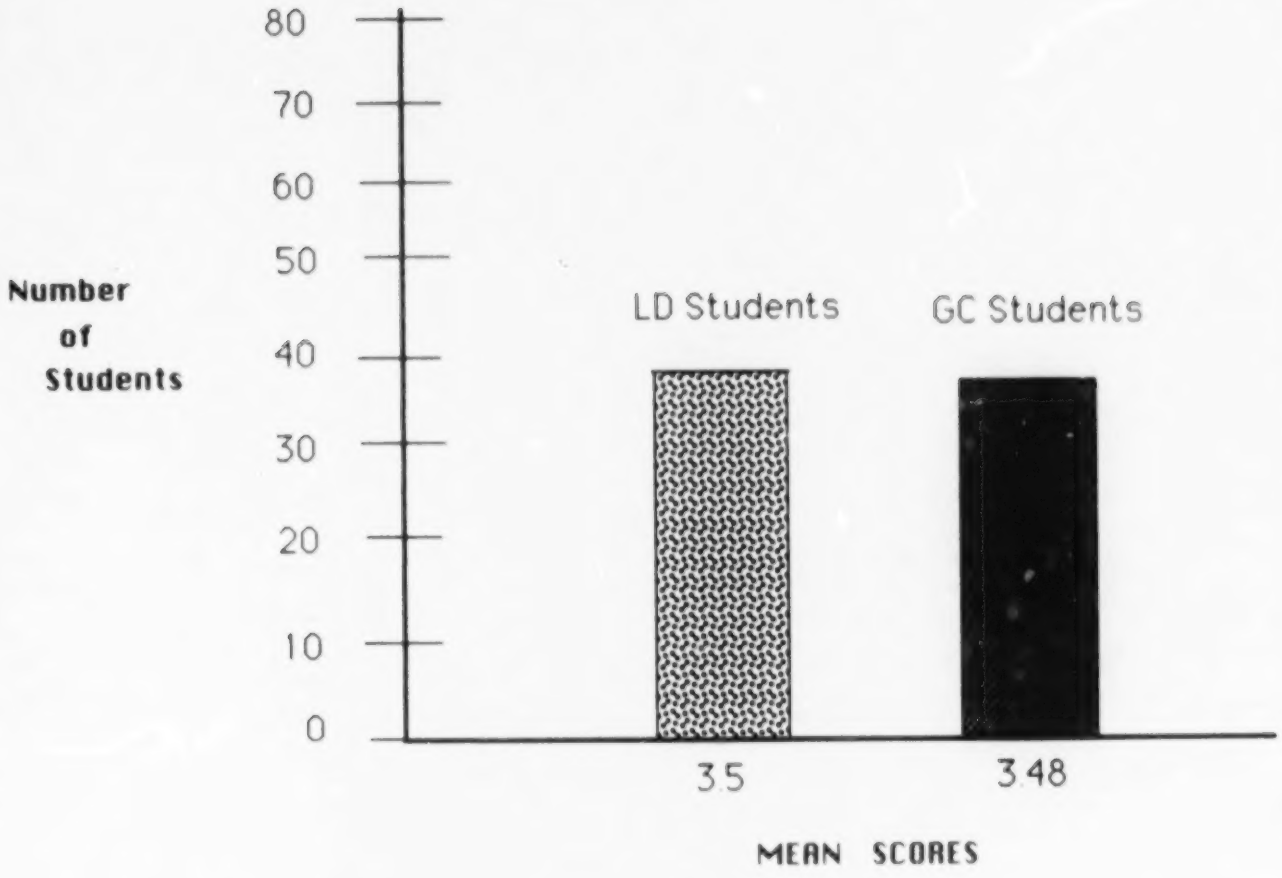
80
70
60
50
40
30
20
10
0
Number of Students
LD Students
GC Students
3.5
3.48
MEAN SCORES

Figure 3

3. Comparing the Self-Esteem Levels of Learning Disabled Students and Non-Learning Disabled Students : The previous scores should also be compared with non-disabled students who routinely took the Janis-Field to assess their self-esteem levels when entering General College. For example, the mean Janis-Field score for entering GC freshmen in the Fall of1985 was 3.48 with a standard deviation of about .50. A mean score of 3.48 is similar to the pre-, intermediate and post-participation means of the LD project participants. It should be noted that this finding does not support the assumption from the current professional literature that the LD students would have lower self-esteem than their peers. (See introduction.) See figure 3.

4. Coorelating the Janis-Field Scores to Other Instruments: During the third year, the Rosenberg was administered at the same time as the Janis-Field. This was done for two reasons. First, the project staff wished to check the validity of the Janis-Field, as it is not an instrument commonly used by other learning disability researchers. Second, it was postulated that the Rosenberg would provide similar or different data to describe the self-esteem levels of the the Project participants.

As a result, data from the Rosenberg was obtained for 24 participants during the third year of the Project. The mean score on the Rosenberg was 3.08 (out of a possible 4.0) with a SD of .52. This data was subsequently analyzed to look for a correlation between the two self-esteem instruments. The Pearson Product-Moment correlation between these two instruments was .85. This figure suggests that the two instruments were measuring the same characteristic. Also, the Pearson Product-Moment coorelation showed that the Project participants reported similar ("average") levels of self-esteem when measured with both instruments. It should be noted, however, that these results should still be interpreted cautiously given the small sample.

In summary, these are the findings concerning the self-esteem levels of the participants in the LD Transition Project:

- The mean self-esteem levels of of the LD individuals during the three years of Project participation were in the "average" range of self-esteem.
- The self-esteem level was a stable score that remained constant during the entire data collection period.
- The mean self-esteem score of the LD participants was similar to their non-learning disabled peers in General College.
- The mean self-esteem score of the LD individuals did not significantly change during Project participation, when measured by both the Janis-Field and the Rosenberg.

## *Discussion*

A number of factors should be noted when interpretating the previous information about the average to above-average self-esteem levels of the student/participants from the LD Transition Project.

First, exploring the whole area of self-esteem is difficult because there currently are no established definitions of what constitutes an individual's level of self-esteem or self-concept. This ambiguity is further complicated by the paucity of knowledge concerning the psychosocial ramifications of learning disabilities on adolescents and adults. As seen in this limited study, we can obtain "levels of self-esteem" from standardized instruments and buttress them with casenotes, but we cannot be confident about exactly what we are measuring or how it relates to other critical factors in the everyday environment. All results need to be interpreted with the understanding that it is difficult to measure the self-esteem of LD individuals, as no tests exist which have norms for this population. It is also important to remember that this was meant to be a preliminary study about a specific characteristic of learning disabilities, and not an evaluation of self-esteem.

Second, selection of project participants through initial referrals from the high school teachers may have strongly influenced the self-esteem findings for the overall group. The teachers told the Project staff that they were referring their "best LD students" to the Project. They believed this pool of LD students would have the most potential to succeed either academically or vocationally after high school graduation. Is an average or above average level of self-esteem directly related to postsecondary or vocational success? There is no empirical data in the current literature to support or dispute this idea, although the staff has postulated that this relationship might be present in the findings of this study.

Third, the emphasis of the LD Transition Project was on service rather than research. As a result, this focus signficantly influenced the collection and interpretation of the self-esteem data. A few examples follow:

A) Instruments were chosen to measure self-esteem which could be given and analyzed as quickly and efficently as possible. The Janis-Field and the Rosenberg were seen to be advantageous because they had few items, were easy to administer and took little time to score. However, the staff found that the instruments were less helpful overall to find in-depth knowledge about the self-concept of the LD student/ participants.

B) The service emphasis made it difficult to find and follow a comparable control group of LD adolescents and adults. The primary focus of the Project was appropriate transition service delivery for the LD student/participants and their families, instead of following LD individuals who would not participate the Project intervention.

C) The staff choose to work with fewer students more intensively than a larger group in a more superficial manner. As a result, the of LD sample is relatively small for research purposes, but adequate for a comprehensive service delivery model.

Fourth, it should also be emphasized that self-esteem levels do not occur in a vacuum. Observations in the Project casenotes demonstrated that crucial factors (i.e. mental or physical health, chemical dependency, family crisis, financial stability, etc.) varied greatly among individuals. These factors could have effected the LD individuals' self- concepts during different situations, although the overall self-esteem levels remained constant. Because it seems that self-esteem is not one isolated variable, but an inter-relationship of complex factors, the mean levels of self-esteem reported in this paper should be viewed with caution.

In conclusion, the author strongly encourages other LD service providers to explore this important area of development with their own population, using the instruments and protocols which have been described in this paper. Examples of further research could include replicating this study with a control group, using a larger LD sample or using different self-esteem instruments. Other questions to still be explored are: a) Do college bound LD students have the same self-esteem levels as non- college bound LD students? b) Do LD students who have been selected by their teachers as having the potential to succeed in postsecondary education have similar or different self-esteem levels than LD students who were not selected by their teachers? c) Do LD students who receive transition services have similar or different self-esteem levels than a control group who does not receive the intervention? and d) Do LD individuals have higher self-esteem levels than previous suggested?

Further research is unquestionably necessary about both the psychosocial ramifications of learning disabilities and the level of the self-esteem of learning disabled individuals. It is hoped that the preliminary observations of one subset of LD adolescents and adults will spark further inquiry into this critical area.

ACKNOWLEDGEMENTS: Preparation of this article was supported by General College-University of Minnesota and a transition grant from OSERS-the U.S. Department of Education. This article is based, in part, on the statistical work by Trudy Dunham. The author also gratefully acknowledges the assistance of the following individuals in the creation and editing of this manuscript: Betty Aune, Loring Brinckerhoff, Terry Collins, Janis Johnson, Jan Leuenberger, Joan McGuire, Mary Morris, Jean Ness, Ann Ryan, Stan Shaw and Mark Shelfsky. Their valuable comments are deeply appreciated.

## REFERENCES


Alley, G., Deshler, D., Clark, F., Schumaker, J. & Warner, M. (1983). Learning disabilities in adolescent and adult populations: Research implications (Part II). Focus on Exceptional Children. 15(9). 1-14.

Beare, D. (1975). Self-concept and the adolescent L/LD student. TPGA Journal. 4 (1). 29-32.

Bergman, M. (1986). Organic dysfunction linked to LD disrupts normal social development. Hill Top Spectrum. 3 (3). 2-5, 8.

Brill, J. & Brown, D. (1986). Keeping your job at the water cooler: Social skills, employment and learning disability. In Association on Handicapped Student Service Programs in Postsecondary Education (Ed.), Support Services for LD Students in Postsecondary Education: A Compendium of Readings (pp.129-133). Columbus, Ohio: Association on Handicapped Student Service Programs in Postsecondary Education.

Brown, D. (1982). Rehabilitating the learning disabled adult. American Rehabilitation (1982). 7(3).

Brumback, R. A. & Stanton, R. D. (1983). Learning disability and childhood depression. American Journal of Orthopsychiatry. 53 (2). 262-263. (In Cohen, 1985).

Clary, L. M. (1984). Identifying metacognitive skills in young adults. Paper presented at the 21st Convention of Association for Children and Adults with Learning Disabilities, New Orleans, LA. (ERIC Document Reproduction Service No. ED 249705).

Cohen, J. (1984). Learning disabilities and childhood: Psychological and developmental implications. Paper preesented at the New York Orton-Dyslexia Society Meeting.

Cohen, J. (1985). Learning disabilities and adolescence: Development considerations. In S.C. Feinstein (Ed.), Adolescent Psychiatry, Development and Clinical Studies, (vol. 12, pp. 177-195). Chicago: University of Chicago. pp. 177-195.

Cooper, R. (1986). Personal counseling for the learning disabled college student. In Association on Handicapped Student Service Programs in Postsecondary Education (Ed.), Support Services for LD Students in Postsecondary Education: A Compendium of Readings. ( pp. 109-111). Columbus, Ohio: Association on Handicapped Student Service Programs in Postsecondary Education.

Geist, C. S. & McGrath, C. (1983). Psychosocial aspects of the adult learning disabled person in the world of work: A vocational rehabilitation perspective. Rehabilitation Literature. 44 (7). 210-13.

Hogenson, D. (1985). Positive personality qualities in successful dyslexic adults. Hill Top Spectrum. 3(2). 7-8.

Hoffmann, F. J., Sheldon, K. L., Minskoff, E. H., Sautter, S. W., Steidle, E. F., Baker, D. P., Bailey, M. B., & Echols, L. D. (1987). Needs of learning disabled adults. Journal of Learning Disabilities. 20 (1). 43-52.

Huestis, R. & Ryland, C. (1986). Integrating learning disabilities into the life of adolescents. Paper presented at the 23rd Convention of the Association for Children and Adults with Learning Disabilities, New York City, NY. (ERIC Document Reproduction Service No. ED 269930).

Jacobs, R. & Rerucha, M. (1986). The use of cross-cultural counseling with disabled students. In Association on Handicapped Student Service Programs in Postsecondary Education (Ed.), Support Services for LD Students in Postsecondary Education: A Compendium of Readings (pp.122-128). Columbus, Ohio: Association on Handicapped Student Service Programs in Postsecondary Education.

Kroll, L. G. (1984). LD's--What happens when they are no longer children. Academic Therapy. 20 (2). 133-148.

Kuncaitis, A. (1986). Fostering independence in learning disabled students: A counseling approach. In Association on Handicapped Student Service Programs in Postsecondary Education (Ed.), Support Services for LD Students in Postsecondary Education: A Compendium of Readings ( pp. 112-115). Columbus, Ohio: Association on Handicapped Student Service Programs in Postsecondary Education.

Lutwak, N. & Fine, E. (1983, July). Countertherapeutic styles when counseling the learning disabled college student. Journal of College Student Personnel. pp. 320-324.

Mangrum, C. T.& Strichart, S. S. (1984). College and the learning disabled student. New York, N.Y: Grune and Stratton, Inc.

Morse, D. (1977). Counseling the young adolescent with learning disabilities. The School Counselor. 25 (1). 8-15.

Neault, E. (1986). Remediating social skill disorders for learning disabled students through group counseling. In Association on Handicapped Student Service Programs in Postsecondary Education (Ed.), Support Services for LD Students in Postsecondary Education: A Compedium of Readings (pp.116-122). Columbus, Ohio: Association on Handicapped Student Service Programs in Postsecondary Education.

National Joint Committee on Learning Disabilities. (1987). Adults with learning disabilities: A call to action. Journal of Learning Disabilities. 20 (3). 172-175.

Okolo, C. M., & Sitlington, P. (1986). The role of special education in LD adolescents' transition from school to work. Learning Disability Quarterly. 9 (2). 141-155.

Orzek, A. M. (1984). Special Needs of the learning disabled college student: Implications for interventions through peer support groups. Personnel and Guidance Journal. 62 (7). 404-407.

Robinson, J. P. & Shaver, P. R. (1973). Janis-Field feelings of self-esteem and inadequacy scale. Measures of social psychological attitudes. Ann Arbor, MI: Survey Research Center, Institute for Social Research.

Robinson, J. P. & Shaver, P. R. (1973). The Rosenberg scale of self-esteem. Measures of social psychological attitudes. Ann Arbor, MI: Survey Research Center, Institute for Social Research.

Rosenthal, J. H. (1973). Self-esteem in dyslexic children. Academic Therapy. 9(1). 27-39.

Rosenthal, I. New directions for service delivery to learning disabled youth. Learning Disabilities Focus. 2 (1). 55-61.

Sachs, J. J., Iliff, V. W., & Donnelly, R. F. (1987). Oh, OK, I'm LD! Journal of Learning Disabilities. 20 (2). pp. 92-93,113.

Scheiber, B. & Talpers, J. (1987). Unlocking potential: College and other choices for learning disabled people: A step-by-step guide. Bethseda, MD: Adler and Adler, Inc.

Smith, B. K. (1986). "Wilted flower syndrome." Paper presented at the 23rd Conference of the Association for Children and Adults with Learning Disabilities, New York City, New York. (ERIC Document Reproduction Service No. ED 270913).